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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,765	01/18/2002	William Ho Chang	FLEX 2400	5434

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POON, KING Y

ART UNIT	PAPER NUMBER
2625	

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/053,765	CHANG ET AL.
	Examiner	**Art Unit**	
	King Y. Poon	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 April 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

    4a) Of the above claim(s) *20 and 21* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 20, 21 withdrawn from further consideration pursuant to 37 CFR 1.142(b)

as being drawn to a nonelected species, there being no allowable generic or linking

claim. Election was made **without** traverse in the reply filed on 4/24/2006.

Specification

2.   The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 1-5 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. Claims 1-5 are drawn to functional descriptive

material NOT claimed as residing on a computer readable medium.   MPEP

2106.IV.B.1(a) (Functional Descriptive Material) states:

"Data structures not claimed as embodied in a computer-readable medium are
descriptive material per se and are not statutory because they are not capable of
causing functional change in the computer."

"Such claimed data structures do not define any structural or functional
interrelationships between the data structure and other claimed aspects of the invention
which permit the data structure's functionality to be realized."

Claims 1-5, while defining a computer readable medium and software, do not

define a "the software embodied in a computer-readable medium" and is thus non-

statutory for that reasons.

The examiner suggests amending the claim to " A computer-readable medium

encoded with the software" in order to make the claim statutory.

"In contrast, a claimed computer-readable medium encoded with the data
structure defines structural and functional interrelationships between the data structure
and the computer software and hardware components which permit the data structure's
functionality to be realized, and is thus statutory." - MPEP 2106.IV.B.1(a)

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1, 3, 5-8, 10, 12-16, 18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Lobiondo (US 5,287,194) in view of Gase (US 6,856,430).

Regarding claims 1: Lobiondo teaches in a computer readable medium (column

3,lines 40-42, a software inherently stored in a computer readable medium), an

information apparatus (the computer that scheduler is located, column 3, lines 43-44)

data output software for managing output of content to a selected output device (column

3, lines 45-50), comprising: software for accessing at least part of said content (portion

of the job, column 6, lines 50-55-68); software for at least one attribute corresponding to

the one or more output devices (column 3, lines 64-68); software for selecting one of said one or more output devices for rendering content based at least in part on the received attributes (column 4, lines 45-69); software for conforming at least part of the content into one or more output images with the at least one attribute related at least in part to the selected output device (column 4, lines 50-68); software for generating at the information apparatus an output data that includes said one or more output images; and software for delivering the output data for rendering by the selected output device (column 4, lines 55-68).

Lobiondo does not specifically teach establishing a communication channel between the information apparatus and one or more output devices for obtaining the attribute of the printer.

However, Lobiondo teaches scheduler is responsive to capability of the printer (column 3,lines 64-65, and the information is located on the printer column 4, lines 5-10).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have provide a communication channel between the information apparatus and one or more output devices for obtaining the attribute of the printer that is store in the printer.

Lobiondo does not teach generating at the information apparatus an output data that includes said one or more output images.

Gase, in the same area of distribute type of printing from document created by a

host computer (column 4, lines 25-30), teaches generating at the information apparatus

an output data that includes said one or more output images (column 5, lines 14-20).

Therefore, it would have been obvious to a person with ordinary skill in the art at

the time the invention was made to have modified Lobiondo to include: generating at the

information apparatus an output data that includes said one or more output images such

that 1) it would have allowed the server to process the print job and send it to the printer

with minimum interruption (column 6, lines 55-60, Gase); and 2) it would have allowed

Lobiondo to correctly schedule the print job and to avoid the situation that a print job can

not be printed due to the printer's incapable of printing the print job during print job

execution (column 1, lines 45-65, Gase).

Regarding claim 3: Lobiondo teaches discovering the selected output device as

one of one or more output devices that are discovered by the information apparatus as

being available for rendering the output content (column 2, line 53).

Regarding claim 5: See discussion of claim 1, the printer files of column 3, lines

65-68 is being viewed as the printer profile.

Regarding claim 6: Lobiondo teaches wherein the output device is one of a

plurality of output devices and the method includes the step of selecting the output

device from said plurality of output devices (column 2, lines 50-68).

Regarding claim 7: Lobiondo teaches obtaining image attributes that include one

or more of resolution, color space, output size, resolution, bit depth, number of color

channels, compression method, an image format indicator, and rendering intent (column

4, lines 49-52, column 3, lines 50-55).

Regarding claim 8: Gase teaches encoding said one or more output images with

mixed raster content encoding (116, fig. 4).

Regarding claims 10, 16: Please see discussion of claim 1.

Rendering content or information related to rendering or rasterization parameters

are being viewed as the colors, graphics, or fonts of column 37-45, Gase that is to be

render by the printer of 12, fig. 2 of Gase. Lobiondo teaches not all such color or

graphic can be rendered by the printer (column 4, lines 40-52, column 3, lines 50-65).

Regarding claim 12: Lobiondo teaches wherein the output device is one of a

plurality of output devices and the method includes the step of selecting the output

device from among said plurality of output devices (column 4, lines 45-68).

Regarding claim 13: Lobiondo teaches wherein the output device is one of a

plurality of output devices and the step of receiving at least an indication includes

receiving at least an indication from one or more output devices related to rendering the

content at the output devices respectively (column 3, lines 64-65).

Regarding claim 14: Lobiondo teaches obtaining, as said one or more

rasterization parameters, one or more of resolution, color space, output size, resolution,

bit depth, and number of color channels (column 4, lines 49-52, column 3, lines 50-55).

Regarding claim 15: Lobiondo teaches in which the conforming of at least part of

the content includes one or more of a color correction operation, a color matching

operation, a color management operation, a scaling operation, an interpolation

operation, a color space conversion, a compression, a decompression, a segmentation,

a de-segmentation, a storing, a retrieving and a halftoning operation (column 5, lines

15-25).

Regarding claim 18: Lobiondo teaches conforming at least part of the content

with rasterization parameters that include one or more of resolution, color space, output

size, resolution, bit depth, and number of color channels (column 4, lines 49-52, column

3, lines 50-55).

6.   Claims 2, 11, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Lobiondo (US 5,287,194) in view of Gase (US 6,856,430) as applied to claims 1, 10, 16

above, and further in view of Buckley (US 6,542,173).

Regarding claims 2, 11, 17: Lobiondo does not teach in which the software for

establishing a communication channel includes software for establishing a wireless

communication channel.

Buckley, in the same area of converting document data to be printed by printer,

teaches establishing wireless communication/short range (infrared) between client, print

server and printer (column 6, lines 1-8, column 5, lines 32-35, column 5, lines 55-60).

Therefore, it would have been obvious to a person with ordinary skill in the art at

the time the invention was made to have modified Lobiondo to include: the software for

establishing a communication channel includes software for establishing a wireless

communication/short range channel to: 1) increase system versatility, 2) eliminate all

the spaces/room for connecting cables and 3) allowed Lobiondo's invention to be used

in all kind of network system as taught by Buckley, column 6, lines 1-8).

7.   Claims 4, 9, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Lobiondo (US 5,287,194) in view of Gase (US 6,856,430) as applied to claims 1, 5, 16

above, and further in view of Freedman (US 4,839,829).

        Regarding claims 4, 9, 19: Lobiondo does not teach providing payment

information over the communication channel as compensation for the rendering of the

content by the selected output device, in the detailed description.

        However, Lobiondo, column 1, lines 13-32, teaches "providing payment

information over the communication channel as compensation for the rendering of the

content by the selected output device" is well known in the art and was taught by

Freedman.

        Therefore, it would have been obvious to a person with ordinary skill in the art at

the time the invention was made to have modified Lobiondo to include: providing

payment information over the communication channel as compensation for the

rendering of the content by the selected output device because: 1) a person with

ordinary skill in the art would like to be compensated for the print job service provided

and 2) a person that invest in a print shop would like the price being confirmed before

the print job is printed to avoid arguments.

Conclusion

8.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to King Y. Poon whose telephone number is 571-272-
7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for
the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the
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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should
you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

July 7, 2006

KING Y. POON
PRIMARY EXAMINER